

## Memorandum

Date: May 29, 1996

To: CALFED Bay-Delta Program Coordination Team

From: Lester A. Snow, Executive Director  
CALFED Bay-Delta Program



Subject: Analytical Tools and Relationships for CALFED Bay-Delta Program Assessment

We will be conducting focused work sessions to discuss potential analytical variables, relationships, and tools that we are developing for CALFED Bay-Delta Program (CALFED) assessment purposes. A list of work session topics, perspective attendees, dates and times are attached. The sessions will be held in Room 1131, 1416 9TH Street, Sacramento. If you believe there are others within your respective organizations that should be attending the various sessions, please contact Rick Breitenbach at (916) 657-2666. Similarly, please identify any individual within your organization that should review and comment on these analytical tools but cannot attend the sessions.

### Proposed Impact Assessment Strategy

An assessment variable represents an important change to environmental conditions possibly caused by CALFED actions that can be judged as beneficial or detrimental relative to human values and uses. The value of each assessment variable is determined by a "chain of relationships" connecting a CALFED action (e.g., increasing river flows during the critical period for smolt outmigration) to the assessment variable deemed important and being evaluated (e.g., chinook salmon out migration success). To conduct the assessment, each relationship in the chain must be evaluated using analytical tools that may include simulation models, analyses of historical data, calculated indices, or expert opinions.

The proposed assessment strategy is designed to provide the following benefits:

- The chains of relationships can document the assumed connections between possible CALFED actions, important assessment variables, and the types of analytical tools (e.g., model runs or historical data) used to evaluate the relationships;

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#### California

The Resources Agency  
Department of Fish and Game  
Department of Water Resources  
California Environmental Protection Agency  
State Water Resources Control Board

#### CALFED Agencies

#### Federal

Environmental Protection Agency  
Department of the Interior  
Fish and Wildlife Service  
Bureau of Reclamation  
Department of Commerce  
National Marine Fisheries Service

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- The chains of relationships can be easily modified and applied to multiple variations in CALFED components and actions; and
- The chains of relationships can be built and evaluated using widely different types of tools and available information.

### Next Step

Prior to the work sessions, we will distribute for review:

- An overview of the proposed assessment strategy;
- A preliminary list of the assessment variables that will be used to evaluate and compare the impacts and benefits of the multiple variations in CALFED components and actions;
- Charts showing the chains of relationships that govern the responses of the assessment variables to potential CALFED actions; and
- Descriptions of tools to be used to evaluate the important relationships between variables that control the responses of the assessment variables.

At each of the focused work sessions, we will seek input about the following aspects of the assessment strategy:

- Have we identified the proper set of assessment variables for each resource topic;
- Have we identified the appropriate set of control variables and relationships that will determine the response of each assessment variable to CALFED actions;
- Have we identified the most appropriate analytical tool to measure each relationship in the chains; and
- Are better simulation models, historical data, or indices of environmental conditions available (within the Phase II time frame)?

If you have any questions, please call Rick Breitenbach at (916) 657-2666.

Attachment